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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kym John Keightley

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05/15/2008

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EXAMINER

TALBOT, MICHAEL

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

05/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,096	Applicant(s) KEIGHTLEY, KYM JOHN	
	Examiner MICHAEL W. TALBOT	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 16 is objected to because of the following informalities:

Refer to claim 16, lines 5 through 6, the phrase "a hole saw" should be changed so as to read --the second hole saw-- to provide proper antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "said at least one drive pin" in lines 1 through 2. There is insufficient antecedent basis for this limitation in the claim. For examination purposes and as best understood, claim 27 has been examined as being dependent upon claim 26 (where the claim limitation of "at least one drive pin" was first introduced), in lieu of being dependent upon claim 24 as presented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3726

5. Claims 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5,624,213) in view of Despres (US 6,641,338). Anderson '213 shows in Figures 1-3 an improved hole saw boss (46) including a threaded member (46) incorporating a first threaded portion (length Y adjacent to spacer 60A) adapted to engage a threaded bore (20) of a first hole saw (12) and a second threaded portion (length Y adjacent to length Y adjacent to spacer 60A) adapted to engage a threaded bore (20A) of a second hole saw (12A), wherein a second hole saw having a threaded bore diameter smaller than the first hole saw (Fig. 3). Anderson '213 further shows the first and second hole saws including cutting blades, wherein the second hole saw cutting blade has a diameter smaller than the first hole saw cutting blade (Fig. 3). Anderson '213 further shows the boss including a base member (28,32) to which the threaded member is connected (Fig. 2). Anderson '213 further shows the first and second threaded portion diameters correspondingly engage with commonly available hole saw threaded bore diameters (col. 3, lines 1-34 and col. 4, lines 12-28 and 56-63). Anderson '213 further shows at least one threaded portion is of a length capable of accommodating (via extended length Y shown to the left of the inner hole saw cutter 12A as shown in Figs. 2 and 3) more than one hole saw of different cutting diameters (Fig. 3 and col. 4, lines 12-28 and 56-63). Anderson '213 further shows the base member and the threaded member include a central aperture (50) adapted to allow a drill bit (66) to fit there through (Figs. 1 and 3). Anderson '213 further shows the boss including a connection means (via integral with boss) which is configured to engage a mandrel (38,40) or drive means. Anderson '213 further shows the second hole saw is chosen to fit snugly within an existing aperture of a work piece, wherein the first hole saw is adapted to drill a hole larger than the existing hole into the work piece (col. 4, lines 12-28). Anderson '213 further shows a cutting surface (26A) of the second hole saw extending beyond a cutting surface (26)

Art Unit: 3726

of the first hole saw (Fig. 3). Anderson '213 lacks the hole saw boss having a diameter of the second threaded portion being of a stepped down configuration to that of the first hole saw.

Despres '338 shows in Figures 1-11 a hole saw boss (50) having a first (61) and second (63) portions with diameters in a stepped down configuration. In view of this teaching of Despres '338, it would have been obvious to one of ordinary skill in the art to modify the hole saw boss of Anderson '213 to include a stepped down boss configuration as taught by Despres '338 to accommodate different sized attachment bores exhibited on commonly constructed hole saws with various cutting diameters, thus improving the versatility of the hole saw assembly (col. 13, lines 37-41).

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thuesen (US 5,967,709) in view of Despres (US 6,641,338). Thuesen '709 shows in Figures 1-3 an improved hole saw boss (1,2,3) including a base member (4,8) having at least one notch (10), a first threaded member (base portion of 3) extending outwardly from the base member and adapted to accommodate a threaded bore of a first hole saw (16), a second threaded member (tip end portion of 3) extending outwardly from the first threaded member and adapted to accommodate a threaded bore of a second hole saw, and at least one drive pin (5) configured to engage both of the at least one notch on the base member and an exiting aperture (17) on at least one of the hole saws so as to prevent over-tightening of the hole saws on the threaded members. Thuesen '709 lacks the second threaded member being of a stepped down diameter to accommodate a hole saw having a threaded bore diameter smaller than the first hole saw.

Despres '338 shows in Figures 1-11 a hole saw boss (50) having a first (61) and second (63) portions with diameters in a stepped down configuration. In view of this teaching of Despres '338, it would have been obvious to one of ordinary skill in the art to modify the hole saw boss of Thuesen '709 to include a stepped down boss configuration as taught by Despres '338 to

Art Unit: 3726

accommodate different sized attachment bores exhibited on commonly constructed hole saws with various cutting diameters, thus improving the versatility of the hole saw assembly (col. 13, lines 37-41).

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thuesen (US 5,967,709) in view of Despres (US 6,641,338). Thuesen '709 in view of Despres '338 discloses the claimed invention except for the drive pins being of a magnetized material composition. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to manufacture the drive pins from any magnetized material composition for the purpose of improving the driving contact area between two parts and/or to eliminate loss of the driving pins during assembly/disassembly, because it has been held to be within the general skill of a worker in the art to select a known material composition on the basis of its suitability for the intended use as a matter of obvious design choice.

Response to Arguments

8. Applicant's arguments with respect to claims 16-27 have been considered but are mostly moot in view of the new ground(s) of rejection as presented above.

9. Examiner respectfully disagrees with Applicant's arguments that the above applied references do not teach the "threaded stepped down configuration of the hole saw boss". Anderson (US 5,624,213) and Thuesen (US 5,967,709) clearly teach a threaded hole saw boss used for attachment of multiple hole saws, which is a very well-known feature in the art as evidenced by several references listed in the prior art of record that teach this feature. Despres (US 6,641,338) clearly teaches another well-known attachment means for the hole saw boss (50) having a stepped down configuration (61,63) for the attachment of multiple hole saws, regardless of the fact that the multiple hole saws may not be connected at the same time. With these two well-known teachings, it would have been obvious to one of ordinary skill in the art to

Art Unit: 3726

combine to two concepts to arrive at Applicant's claimed feature of "a hole saw boss having a threaded stepped down configuration" for the attachment of multiple hole saws of different diameters.

10. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3726

13. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. David P. Bryant, may be reached at 571-272-4526.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3726 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. W. T./
Examiner, Art Unit 3726
12 May 2008

/David P. Bryant/
Supervisory Patent Examiner, Art Unit 3726